A.I.A. FILE NO. 17-A

6d
AI

AllianceWall®
PORCELAIN ON METAL

VENEER PANELS ■ INSULATED SANDWICH PANELS ■

A.I.A. FILE NO. 17-A

AllianceWall

Porcelain Enamel on Steel or Aluminum Veneer Panels . . .

Tested for durability. AllianceWall veneer panel production samples have successfully passed the tests for accelerated aging in building panels as contained in ASTM test method D 1037-55T (forest products cycle) originally devised by the U. S. Bureau of Standards.

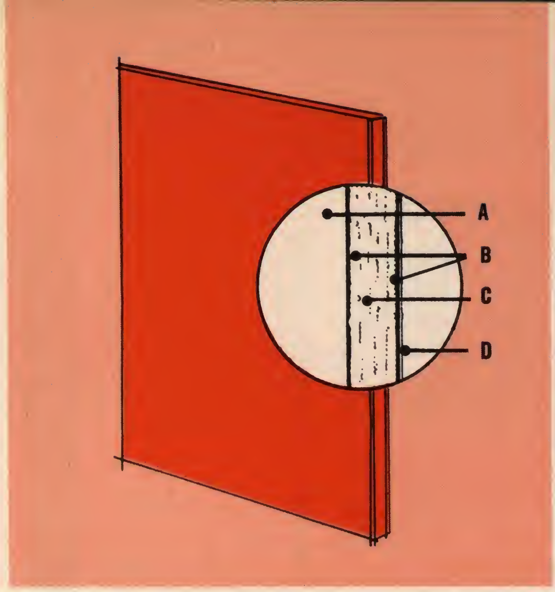
Panel workability lowers labor costs. Flat panels with light gage metal are easy to drill and saw . . . easy on-site revisions assure flexibility. AllianceWall continuous process manufacturing provides larger panels that go up faster, reduce total joint length, and minimize caulking.

Wide color selection, better delivery. Four blues, three greens, two blue-greens, three yellows, red, orange, light orchid, grey, charcoal grey, tan, deep maroon, three green stipples, grey stipple, charcoal grey stipple, tan stipple, and red stipple. Plain colors optional in gloss or semi-matte finish. AllianceWall maintains a permanent record of colors supplied on every order to assure accurate matching at future dates. Engineered special cartons assure job delivery in perfect condition.

Standard sizes—2, 3, 3½ and 4 foot widths by 6, 8, 10 and 12 foot lengths. **Special sizes** (up to 4 by 12 foot) available on special order.

Exterior panels for new construction—for remodeling.
- Store fronts
- Multi-story buildings
- Motels, apartments

Carefree interior panels.
- Laboratories
- Corridors
- Rest rooms
- Food preparation areas



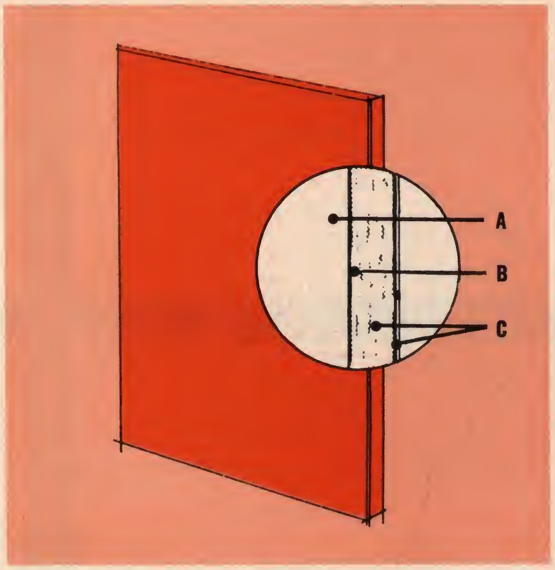
Exterior Panels

A ● Porcelain enameled metal skin
Steel: .010 to .015″ thick
Aluminum: .020 to .025″ thick

B ● Neoprene base adhesive

C ● Core: Nom. ⅛″ or 3/16″ hard board or cement asbestos board

D ● Skin: 24 gage galvanized steel or aluminum, or porcelain enameled metal as above



Interior Panels

A ● Porcelain enameled metal skin
Steel: .010 to .015″ thick
Aluminum: .020 to .025″ thick

B ● Neoprene base adhesive

C ● Core: Nom. 3/16″ hardboard, aluminum foil vapor barrier

INSULATED SANDWICH PANELS
Alliance Y. M. C. A.
Alliance, Ohio
Architect: Richard Zuber
Contractor: Paul Kintz

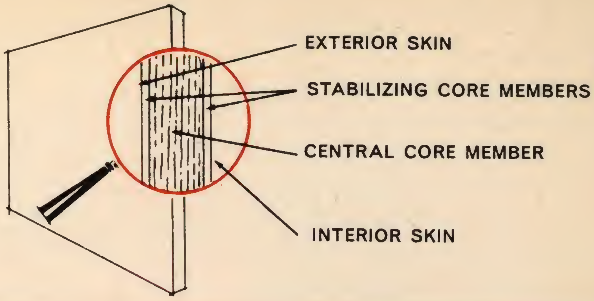
VENEER PANELS FOR EXTERIOR USE
First Federal Savings and Loan Association Building
Uniontown, Pennsylvania
Architect: John Schurko, Pittsburgh
General Contractor: Fairchance Lumber, Pittsburgh

VENEER PANELS FOR INTERIOR USE
Hommel Research Center
Carnegie, Pennsylvania
Architect: Bowers & Barbalat
Contractor: Campbell Co.

AllianceWall

curtain wall
window wall

insulated sandwich panels



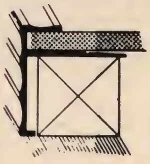
PANEL FEATURES • TECHNICAL DATA

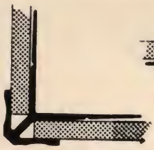
SERIES	EXTERIOR SKIN	STABILIZING CORE MEMBER	CENTRAL CORE MEMBER	INTERIOR SKIN	Nominal Thickness	Approx. lbs. sq. ft. (1)	Approx. "U" value (2)
HC	Porcelain Enamel on steel or Aluminum	⅛" tempered, fire retardant hardboard	Fiber board treated for moisture resistance and protected from rot and vermin	Porcelain enamel on steel or aluminum; mill finish aluminum or galvanized steel	1" 1¼" 1½" 1¾" 2"	5.3 5.7 6.1 6.5 6.9	.29 .24 .20 .18 .16
AC	Porcelain Enamel on steel or Aluminum	⅛" asbestos cement board rated non-combustible	Fiber board treated for moisture resistance and protected from rot and vermin	Porcelain enamel on steel or aluminum; mill finish aluminum or galvanized steel	¾" 1³⁄₁₆" 1⅝" 2¹⁄₁₆"	4.9 5.5 6.2 6.9	.40 .29 .21 .17
HL	Porcelain Enamel on steel or Aluminum	⅛" tempered fire retardant hardboard	Expanded polystyrene (plastic foam) self extinguishing type. A light weight inert material, impervious to moisture, rot and vermin.	Porcelain enamel on steel or aluminum; mill finish aluminum or galvanized steel	1" 1¼" 1½" 1¾" 2" 2¼"	3.3 3.3 3.4 3.4 3.5 3.5	.27 .21 .17 .15 .13 .12
AL	Porcelain Enamel on steel or Aluminum	⅛" asbestos cement board rated non-combustible	Expanded polystyrene (plastic foam) self extinguishing type. A light weight inert material, impervious to moisture, rot and vermin.	Porcelain enamel on steel or aluminum; mill finish aluminum or galvanized steel	1" 1¼" 1½" 1¾" 2" 2¼"	4.1 4.1 4.2 4.2 4.3 4.3	.28 .22 .18 .16 .14 .12

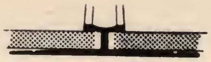
(1) Weights are for steel exterior and interior skin. Deduct 0.5 lbs. per sq. ft. for each aluminum skin used.
(2) Calculated "U" values based on 15 MPH wind on exterior, still air interior.

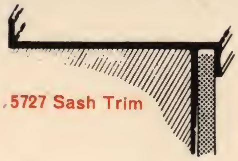
Continuous process manufacturing permits easy-to-handle lighter gage porcelainized metal. Exterior and interior panel skins are laminated to the type of rigid core material best suited to the designer's needs. In addition to the standard panel combinations shown above, AllianceWall will laminae other combinations to meet specifications of special orders. Insulated sandwich panels are cut to any desired size in the factory (up to 4 ft. wide by 12 ft. long); same color and finish selection as listed under Veneer Panels on Page 2.

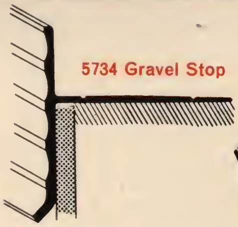
Custom AllianceWall Moldings for ³⁄₁₆" Veneer Panels

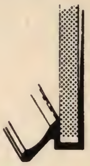

5726 End Stop Cap

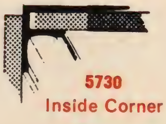

5732 Outside Corner

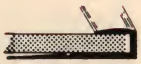

5723 Divider Bar

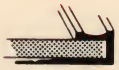

5727 Sash Trim

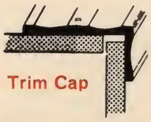

5734 Gravel Stop

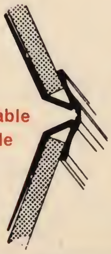

5728 Drip Cover

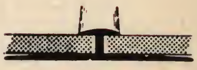

5730 Inside Corner Stop


5724A End Stop


5724 End Stop


5731 Trim Cap


5729 Variable Angle


5723A Divider Bar

CUSTOM MOLDINGS

- In color—porcelain enamel on aluminum to match, contrast or complement AllianceWall panels.
- In buffed and anodized aluminum.
- A complete stock for your convenience—AllianceWall custom moldings to fit nominal ³⁄₁₆" veneer panels are carried in stock by AllianceWall to fill your requirements. AllianceWall can also be used with any metallic or non-metallic molding that will suit a particular purpose.

INSTALLATION WITH CUSTOM MOLDINGS

1. AllianceWall can be installed on any structurally sound surface, if the surface is uniform and true AllianceWall can be applied directly with custom moldings. Other surfaces should be furred with treated wood strips behind all moldings.
2. Surfaces should be cleaned thoroughly and where necessary coated with a neutralizing bonding medium.
3. Nails, screws, or bolts used in erection shall be corrosion-resistant.
4. If furring is necessary, apply in a fashion to permit complete circulation.
5. Caulking shall be run into all moldings before inserting panels.
6. In direct surface application, panel areas shall be comb spread with adhesive — when erected with furring, lumps of adhesive 2" in diameter shall be applied approximately every square foot behind all panels.

The above is a condensation of AllianceWall's standard installation instructions. A complete installation manual is available at your request.

AllianceWall

specifications

I. GENERAL CONDITIONS

II. INSTRUCTIONS to BIDDERS

- **A.** Definition
- **B.** Description of Areas Covered
- **C.** Work Not Included
- **D.** Manufacturer

Porcelain enameled panels (veneer and/or insulated) shall be manufactured by AllianceWall Division of AllianceWare, Inc., Alliance, Ohio, and shall be produced by AllianceWall continuous coil process.

III. SAMPLES

A. Representative panel samples shall be submitted by the manufacturer to the Architect for inspection and approval.

IV. MATERIALS, FABRICATION and FINISHES

A. Exterior Skin

Base metal shall be coil stock enameling, steel or aluminum, of an alloy suitable for the application of architectural porcelain enamel. The thickness of the base metal shall be .010" to .015" for steel, .020" to .025" for aluminum.

Base metal shall be properly pre-cleaned and treated to insure the maximum adherence of the porcelain enamel to the base metal.

Both surfaces of all base metal shall receive a ground coat of porcelain enamel which shall be fused to the metal by a separate firing operation.

A color cover coat of porcelain enamel shall be applied to one surface of the ground coat and fused by a separate firing operation.

All porcelain enamel "slip" shall be machine applied with automatic spray equipment to insure the maximum finish uniformity.

Firing temperature shall be approximately 1500°F. for steel, 1000°F. for aluminum.

Color shall be .... (insert color No.) as selected by.................... Finish shall be................ (gloss, semi-matte, other specify).

Porcelain enamel shall be acid resistant type Class "A" or better in accordance with PEI current editions of "Tests for Weather Resistance of Architectural Porcelain Enamels."

B. Stabilizing Core Member—Insulated Panel

In order to insure maximum flatness for the exterior skin, a smooth surface core member shall be provided. This member shall be, ... inches thick (hardboard, cement asbestos board, other specify).

C. Central Core Member—Insulated Panel

The insulating core shall be .... inches thick (fiber board, foamed polystyrene, other specify).

Central Core Member—Veneer Panel

This member shall be nominal (⅛", 3/16" other) .... thick, (hardboard, cement asbestos board, other).

D. Stabilizing Core Member—Insulated Panel

This member as described under "B" above.

E. Interior Skin—Panel Backing

The interior skin shall be (porcelain enamel on steel or aluminum, as in "A" above, 24 gauge galvanized steel, mill finish aluminum, other specify ....).

F. Adhesive

The adhesive used in lamination shall be a permanently elastic type neoprene or rubber base adhesive. Lamination shall be accomplished using heat and pressure. Neither the adhesive selected nor the method of lamination shall be incompatible with core materials used. Adhesive strength shall be equal or better than the strength of any of the core materials.

V. PERFORMANCE

Panels shall have a nominal finish thickness of .... Insulated panels shall have an overall heat transmission co-efficient ("U" value) of ....

VI. ERECTION—Insulated Panels

.... insulated panels shall be blocked properly with elastic blocking devices. NOTE: Recommended sealants (Architect's option).

ERECTION—Veneer Panels

Erection shall conform to practices outlined by AllianceWall standard installation procedures.

Storage and protection of material at job site (described).

VII. SHOP DRAWINGS

Shop drawings shall be furnished by the erector.

VIII. CLEANING

Panels shall be delivered with a surface free from foreign matter. Final cleaning shall be done by the erector.

IX. GUARANTEE

All porcelain enamel finishes shall carry the normal guarantee as required under PEI Specifications.

AllianceWall is manufactured by the AllianceWall Division of AllianceWare, Inc., Alliance, Ohio. AllianceWare, Inc. is a pioneer producer of porcelain-on-steel products with more than twenty-four years experience in the porcelain business to back up every product.

In addition to AllianceWall porcelain-on-steel and aluminum veneer and insulated panels, AllianceWall's modern, highly automated, "straight-line" production facilities turn out porcelain-on-steel chalkboards in coil form and coiled porcelain-on-steel.

A full research and development staff is maintained at all times and in addition to developing new products and perfecting methods, AllianceWall continually tests production samples to assure you of highest quality in their products.

for further information . . . Color charts, samples, specifications, etc., write AllianceWall, Dept. SAV, Box 809, Alliance, Ohio

AllianceWall®

AllianceWall Division, AllianceWare, Inc.,
Box 809, Alliance, Ohio

an amp subsidiary

Digitized by:

INTERNATIONAL

ASSOCIATION
FOR
PRESERVATION
TECHNOLOGY,
INTERNATIONAL
www.apti.org

BUILDING
TECHNOLOGY
HERITAGE
LIBRARY

https://archive.org/details/buildingtechnologyheritagelibrary

From the collection of:

Carol J. Dyson, AIA